

APRIL/MAY 2025

23PCA22 — INTERNET OF THINGS

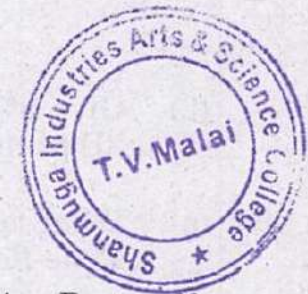
Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. State any two challenges in IOT.
2. List the criteria for analysing Smart objects.
3. Define the term Constrained network.
4. What is CNC Milling?
5. Define the term scraping.
6. What is Arduino?
7. What is Clockodillo?
8. What is Constrained Application Protocol?
9. What is Lean Startup?
10. List any two issues involved in scaling up software in IOT.



SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Describe FOG Computing.

Or

- (b) Elaborate on Sensor and its types.

12. (a) Explain how to perform Routing over Low Power and Lossy Networks.

Or

- (b) Give a brief description on MQTT protocol.

13. (a) Discuss on designing of Beagle Bone Black device.

Or

- (b) Give a brief sketch on issues and types of 3D printing.

14. (a) What are the Technologies used for Real Time Reactions? Explain.

Or

- (b) List and briefly discuss on the libraries that can be used for Embedded system implementations.

15. (a) Explain the parameters used to design IOT Business Models.

Or

- (b) Give a brief account on the methods used in Funding IOT Start-ups.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain Core IOT Functional Stack.

17. Discuss on IEEE 802.15.4.

18. Elaborate on the Laser cutting method used to prototype the Physical design on embedded devices.

19. Devise suggestions for improving Memory Management, Performance and Battery life of Embedded devices.

20. Explain the way of designing and manufacturing Circuit boards in IOT.

